
DEMOGRAPHIC CHANGE IN THE SCAG REGION, 1970-2005

BY JOHN PITKIN

Waves of immigration, births, and domestic migration during the past third of a century have dramatically shifted the demographic composition of the SCAG region and reshaped the context for a broad range of regional planning and policy decisions. Specifically, as recently as 1980, the demographic mix in the region was more nearly similar to the nation's. However, by 2005, the region has a distinctive demographic mix from the rest of the nation. While the general dimensions of the changes in race and ethnicity are widely recognized, the changes in age structure and nativity of the population are less well understood and as significant as those in race and ethnicity.

This essay will first contrast the similarity and differences between the region and the rest of the nation in 1980 and 2005. It will then explain the three interrelated demographic waves that took place in Southern California during the past few decades. Finally, implications for our future are explored.

The large generation of the Baby Boom is now well outnumbered by other nativity cohorts in the SCAG region. In 2005 the native born Under 20 generation comprised 27 % of the region's population, and the New Immigrants, of all ages, who had arrived in the U.S. since 1980 comprised 23 %. With 15 % of the total population, the native born Baby Boomers, then age 40 to 59, are now the third largest nativity cohort in the region.

Exhibit 1 shows the age and nativity mix of the population, with the New Immigrants on the left, shaded purple, and to the right of the vertical axis the native born Under 20 generation outlined at the bottom and the Baby Boom above it.

This mix of generations and nativity groups is very unlike that in much of the rest of the United States, and the differences can be clearly seen from Exhibit 2, which shows the mix in the U.S. excluding the SCAG region. There, the Baby Boom cohort looms much larger, comprising almost a quarter (24%) of the total population, the New Immigrants are relatively less numerous, just 9% of the total, and the Under 20 cohort (26%) makes up almost the same share as in the SCAG region.

The differences in the composition of the population mean that the demographic underpinnings of planning decisions in many areas, from education, housing, and social services to labor force and economic development, are very different in the SCAG region than in most of the nation.

This is a relatively new development. As recently as 1980 the demographic mix in the region was more nearly similar to the nation's, and the Baby Boom generation the dominant cohort. The total population was 11.6 million, two-thirds what it is today. The Baby Boom generation, then age 15 to 34, ac-

counted for 28 % of the total, against 15 % today, and the foreign born population 18 %. Compared with the present, the age-nativity pyramid for that year, shown in Exhibit 3, is skewed much more toward the native born, on the right, and young adults, rather than young children. (The graphs for the two years can be visually compared by pulling back this page.)

Although the mix of nativity and generations in The SCAG region had diverged from the national pattern, the differences were much less than they have since become. In the rest of the U.S. the Baby Boom generation made up even more of the total population than in the SCAG region (5 % more), and the foreign-born were less than a third the share in region.

In Exhibit 4, the age-nativity pyramid for the U.S. in 1980 (excluding the SCAG region) more nearly resembles that for the SCAG region, at a larger scale, than it did in 2005. In fact, if we were to look back ten more years to 1970, we would find that the only substantial difference between the age-nativity pyramids for the SCAG region and the rest of the nation was the difference in scale. For practical purposes, the population of the SCAG region in 1970 was a microcosm of the nation.

How did the population of the SCAG region evolve so rapidly from being dominated by the Baby Boom generation to what it is today? How did it diverge from the rest of the nation, where the aging Baby Boom cohort is still such a large part of the picture? Immigration and births played major roles, but what part was played by *domestic* migration? How did these changes play out over time and how did they interact? To what extent did they feed each other or did one off-set another?

Exhibit 1

SCAG Region, 2005

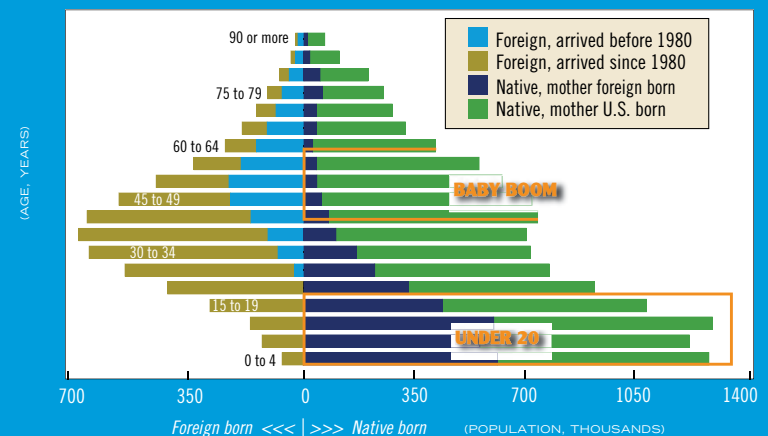
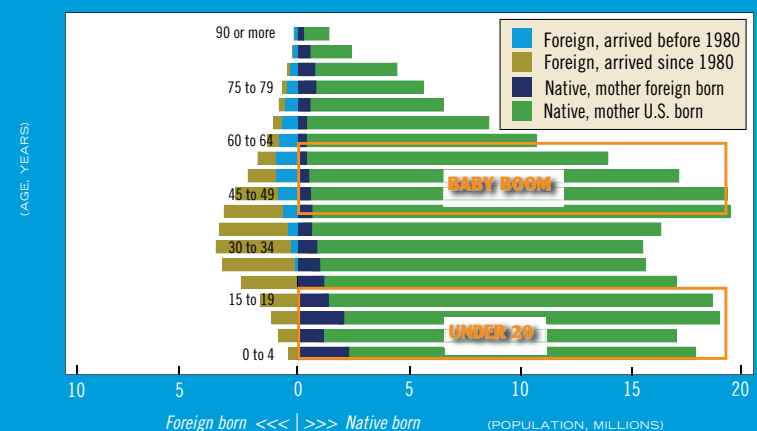


Exhibit 2

United States excluding SCAG Region, 2005





These questions are interesting in themselves. Also the answers to them will give new perspectives on the outlook for future population changes and the likelihood that past trends will continue, accelerate or decelerate. These an-

swers can also inform the planning and decisions continually being made to meet the future needs.

The answers to these questions come from an analysis of detailed census and vital statistics data since 1970 and the start of the “new immigration.” In this analysis data from Census 2000 is especially useful for two reasons. First, it is estimated to be more complete than previous censuses and have a lower net undercount. Second, it is the only census to record the exact years in which foreign born persons entered the United States, and this data can be used to estimate annual immigration for earlier years with much greater precision than was previously possible. These new estimates include most undocumented immigrants. The methods used greatly mitigate the effects of undercounts on the estimates of past immigration and domestic migration.

The new estimates give a more complete and detailed picture of the dynamics of population changes in the SCAG region than existing estimates. In important respects the new estimates are also quite different.

The Wave of Immigration

Between 1970 and 2000 an estimated 7.66 million immigrants came to the SCAG region and 4.54 million still lived in the region as of the 2000 Census after reductions due to immigration, domestic out-migration, and deaths.¹

The annual estimates, which are seen in Exhibit 5, reveal that a long wave in immigration reached its crest in 1989. The wave started from 1970 with



¹ The estimates are made by working backward from the populations counted in Census 2000 using estimated rates of emigration, domestic migration, and mortality. Adjustments are also made for the marked tendency for years of immigration reported in the census to be rounded to years ending in 0 or 5. Technical details of the methods can be found in the author's "Three Demographic Waves and the Transformation of the Los Angeles Region, 1970-2000" at www.usc.edu/schools/sppd/research/popdynamics.

Exhibit 3

SCAG Region, 1980

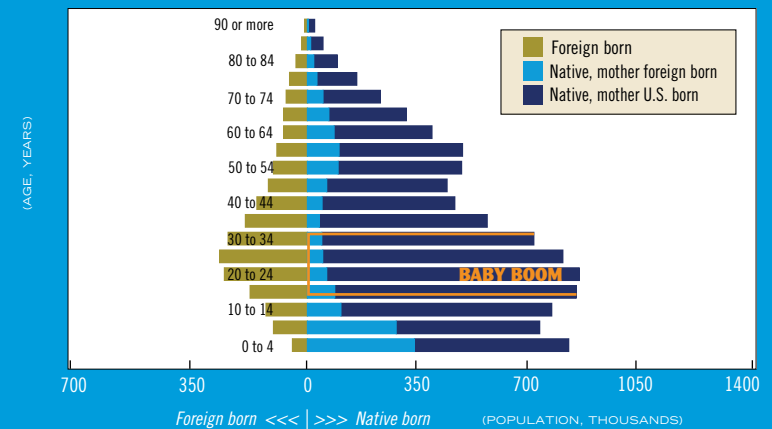
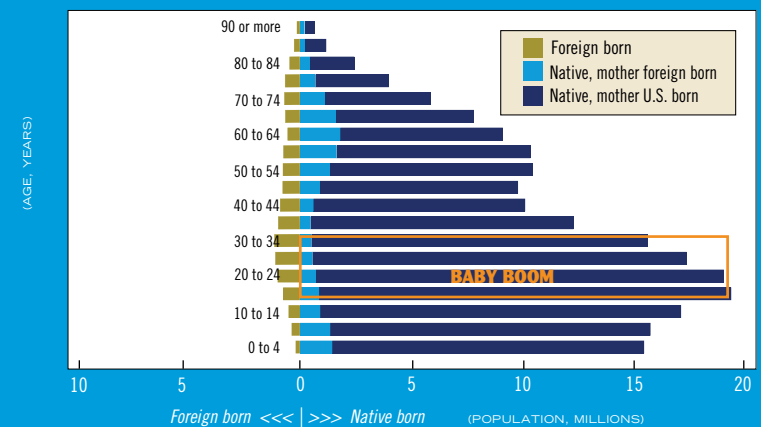


Exhibit 4

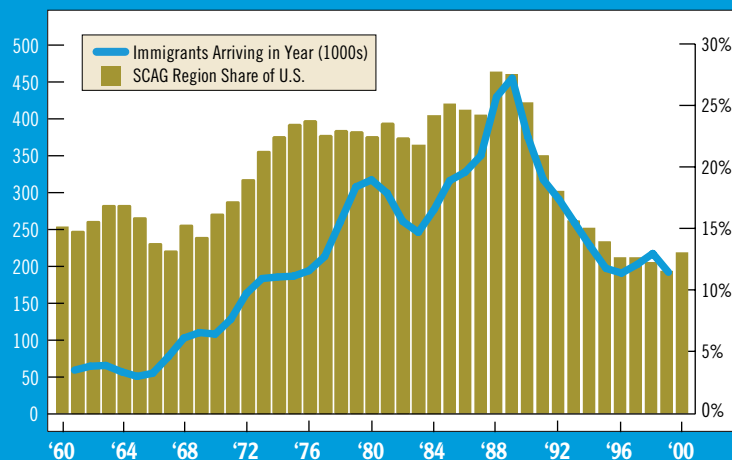
United States excluding SCAG Region, 1980



a rapid increase to an inflow of 313 thousand in 1980. Over the next three years immigration fell 21 percent but then increased rapidly to 419 thousand in 1988, after which it rose another 24 thousand to its peak in 1989. It then plummeted by 56 %, to 194 thousand in 1996 and, by 1998, rebounded to 219 thousand.

Exhibit 5

New Immigrants by Year of Arrival in U.S. and SCAG Region Share of U.S.



The onset and crest of the wave both followed major changes in immigration laws. The wave began soon after passage of the Immigration and Nationality

Act Amendments of 1965 (Hart-Celler Act), which eliminated national quotas on immigrant admissions, and reached its apex following the Immigration Reform and Control Act of 1986 (IRCA). It can be inferred that a large share of all the 2.6 million immigrants legalized under the provisions of IRCA between 1988 and 1991 lived in the SCAG region, since over half are known to have lived in California (State of California, Department of Finance, 1997).

The Reversal of Domestic Migration

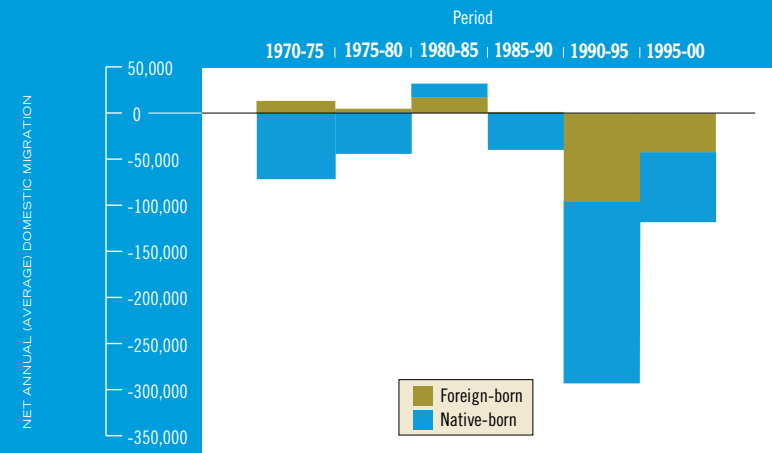
Accurate estimates of domestic migration during the 1970-2000 period can only be made for intervals of five years. These are made using data from the decennial censuses on both current location and place of residence five years earlier.

For most of the 20th century, the SCAG region had been a destination for domestic migration from other states but by the early 1970s the region was sending an annual average of 60 thousand more migrants to other parts of the country than it was receiving. Net domestic migration rose through the early 1980s, when there were small net inflows to the region (Exhibit 6). It reversed direction in the late 1980s and then plummeted in 1990-1995 to a net loss of almost 300 thousand *per year* on average between 1990 and 1995. This wave of out-migration abated to a net outflow of 118 thousand a year on average between 1995 and 2000, still well above pre-1990 flows.



Exhibit 6

Net Domestic Migration, SCAG Region, 1970-2000



In all, the region lost a net total of 2.05 million domestic migrants, or 14 % of its population between 1990 and the 2000, 1.46 million in the first five years alone. To put this in perspective, 2.05 million equaled more than the entire 2000 population of Nevada or the Cincinnati metropolitan area.

At the same time as the surge of domestic out-migration, the nativity composition of domestic migration also shifted. Until 1990 net domestic out-migration had occurred only among the native-born population and there were actually small net inflows of foreign born population (SCAG region

portion of Exhibit 6); the largest movement of foreign-born population during this period was an influx of an average 15 thousand per year between 1980 and 1985. After 1990, however, there was substantial out-migration of the foreign-born, between 1990 and 1995 a net total of 479 thousand and another 209 thousand in the next five years.

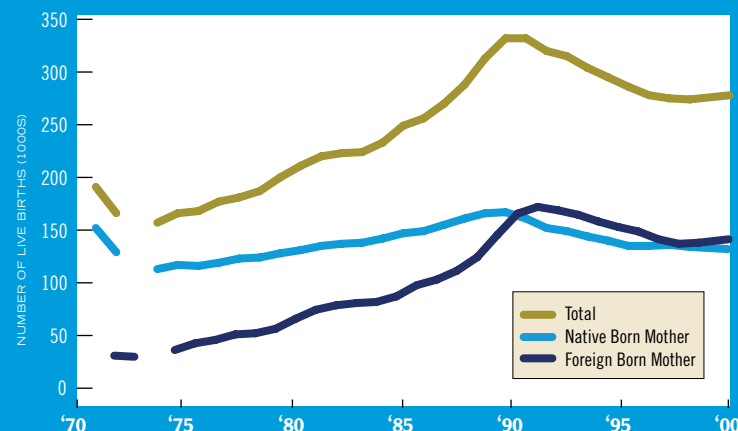
Population movements before 1990 indicate that the SCAG region was the destination of choice for much of the foreign born population. From 1970 to 1975, as the region's native-born population declined by 4 % through domestic migration its foreign-born population grew by 4 % through domestic migration, and the region's share of national immigration was rising. After 1990 the emergence of net domestic out-migration among the foreign-born, 12 % between 1990 and 1995 and another 4 % from 1995 to 2000, coincided with the decline in the region's share of national immigration. The SCAG region had lost much of its attraction for both new and old immigrants.²

A Regional Boom in Births

A boom in births in the SCAG region³ followed the surge of immigration, starting in the early 1970s and reaching its peak in 1991. From a low of 157 thousand⁴ in 1973, the annual numbers of births rose steadily through 1983 and then much more rapidly to 333 thousand in 1991; the number then fell each year, to 274 thousand in 1999 (Total line in Exhibit 7).

Exhibit 7

Number of Births, SCAG Region



Note: Birth data for 1972 are missing.

² Current estimates of annual domestic migration made during the 1990s by the State of California Department of Finance (2005) and U.S. Census Bureau (1999) show sharp peaks in out-migration in 1993 and 1994. For the entire decade these estimates fall well short of the 2000 Census-based estimate of 2.05 million out-migration; the State's estimate was 1.21 million, and the Census Bureau's 1.59 million. The differences are due to more complete coverage of foreign-born migrants in the new estimate, which is based on the 2000 Census, than in the earlier estimates, which relied on changes of address on driver's licenses and federal income tax returns, respectively, to measure migration.

³ From Natality Detail Public Use Files (U.S. National Center for Health Statistics, 1969-2000) by mother's nativity, based on country of birth.

⁴ Births for April 1 – March 31 of following year, to match date of decennial census.



Although a boom in births also occurred in other parts of California, this was a regional and not a national phenomenon. Due to the “Echo Boom” of children born to the Baby Boom generation national births also grew to a peak in 1991, but the increase was less than a third of the 113 % in the SCAG region.

It was not a coincidence that the scale and timing of the region’s birth boom closely resembled the wave of immigration. Immigration raised total births

in two ways. First, it added to the population of women of child-bearing age. Second, the fertility rate among foreign-born women has consistently been much higher than among native-born, in 1990 by an average of 1.66 children per woman (81 %).⁵ As a result, the fertility rate for all women in the SCAG region, which differed little from the national rate in 1970, was 6 % higher in 1980 and 25 % higher in 1990. Of the 7.25 million births in the thirty years starting in 1970, 43 percent (3.10 million) were to foreign-born women.

From the low year of 1973 the number of births to native born women increased 47 % to their peak in 1990 (Native Born Mother line, Exhibit 7). This increase was far exceeded by the 291 percent rise in births to foreign-born women. In 1970, births to native born women had outnumbered those to foreign born by 4 to 1. By 1991, for the first time, there were more births to foreign born women than native born women.

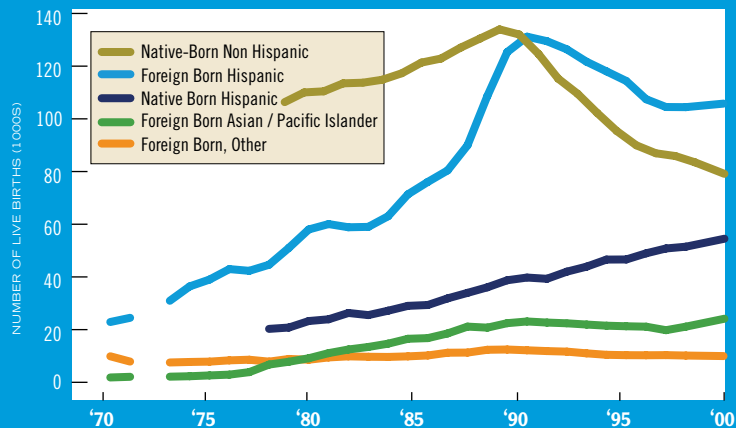
After reaching peaks within a year of each other, births to native and foreign born women fell in parallel to 1999, by 16 and 18 percent, respectively, and by 2000, the region’s fertility rate was only 4 % higher than the national rate. The rate for foreign born women was down by a fourth from 1990 and was well outside the range of earlier years.⁶

⁵ From Natality Detail Public Use Files (U.S. National Center for Health Statistics, 1969-2000) by mother’s nativity, based on country of birth.

⁶ Births for April 1 – March 31 of following year, to match date of decennial census.

Exhibit 8

Number of Births, SCAG Region, by Nativity, Ethnicity, and Race of Mother



Note: Birth data for 1972 are missing.

Exhibit 8 shows the numbers of births in the SCAG region by major origin and race as well as nativity. (Data to break out all births by Hispanic origin and race only became available in 1978.) It is striking that births for all but one major group reached their peaks in 1990 or 1991, to native-born non-Hispanics and foreign-born Latinas, Asian or Pacific Islanders, and other non-Hispanics. The lone exception is native-born Latinas, for whom births

rose without interruption. As we have seen, this decline in births occurred in the context of falling immigration and accelerating losses of migrants to the rest of the nation. Just as rising foreign and domestic in-migration had tended to raise the births in the region before 1991, falling immigration and rapid domestic out-migration afterward worked to lower them.

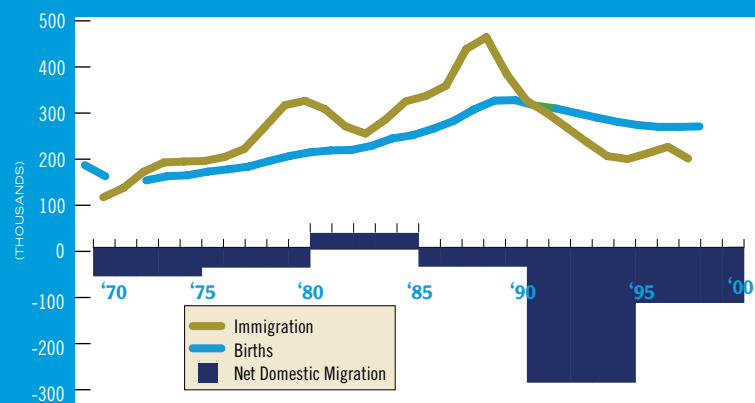
Connections between Trends

Besides these direct effects of immigration on births, how are the size and timing of the demographic changes in the SCAG region linked?

The simultaneous timing of downturns in immigration, domestic migration, and births in the early 1990s is best explained by the 1991-1994 recession, the most severe economic contraction the SCAG region had experienced since the Great Depression (see Exhibit 9). The effects of a national recession were compounded by large losses of defense-related jobs in the region following the end of the Cold War. The region lost 573 thousand jobs; the unemployment rate averaged over 9 percent⁷ in 1992 and 1993. The unusual severity and length of the recession in the region pushed job-seekers to pursue better employment opportunities that were to be found in other states. New immigrants who had previously favored Los Angeles and the SCAG region went elsewhere, and many job-seekers brought families. The resulting losses of women of child-bearing age can account for the simultaneous downturn in births for different nativity-origin groups after 1991. It is also possible that the sour economy played a role in lowering fertility rates among the population that remained in the SCAG region, however this connection is more speculative.

Exhibit 9

Immigration, Births, and Domestic Migration, SCAG Region, 1970-2000



The parallel long-term increases in immigration and domestic migration from the early 1970s through the mid-1980s are also best understood as responses to general changes in the economy.

Although immigrants were impacted as much as the native born by the competition for limited employment opportunities and housing, and other effects of the regional recession, two additional factors may have played a role in causing the abrupt onset of large-scale domestic out-migration by the foreign-born af-

⁷ From Natality Detail Public Use Files (U.S. National Center for Health Statistics, 1969-2000) by mother's nativity, based on country of birth.

ter 1990. First, the cumulative geographic expansion of immigrant "networks" eased dispersal to new destinations. Second, the provision through IRCA of legal documentation to large numbers of immigrants who previously lacked it may have in effect freed a population of many hundreds of thousands to leave the security of a regional haven they no longer needed. Whatever the causes of this new pattern of foreign-born migration, its continuation in the second half of the decade proved that it was not a fluke. Further, it suggests that in the future immigrants will migrate domestically from the SCAG region at rates more like those of their native-born peers than previously.

Future Implications

In summary, this essay describes the size and timing of three large demographic waves that occurred in the SCAG region during the last thirty years of the 20th century and that have shaped the current demographic context for regional planning, forecasting, and decision-making. New estimates of past changes provide greater detail than existing ones and reveal the temporal relationships among the flows of immigration, domestic migration, and births. The new estimates of immigration provide the first detailed, consistent chronology of immigration to the region to include undocumented immigrants.

Probably the most important finding from these estimates is the surprisingly large amount of flux in the SCAG region's population. Signs of this change are the arrival of 7.66 million immigrants between 1970 and 2000, the departure (or death) of 41% of these by 2000, and the net loss of over 2 million domestic migrants in a single decade. The relative stability of the size of the

population combined with earlier, lower estimates of foreign and domestic migration had masked the high rate of turnover of the population.

Though not confined to the SCAG region, similar waves of immigration and births occurred in only a few other regions of the U.S. during this period and their scale was greatest here. Relative to the population of the region, these flows dwarfed those in the rest of the United States. It is a result of these flows that the nativity and ethnic composition and age structure of the population of the region today diverge so widely from that of the nation.

What are the implications for the region's future?

In light of the large fluctuations in demographic flows during the last third of a century, the possibility of future variations makes the projection of the composition of the population three decades forward at best an approximate guide for planning and decision-making. Nonetheless, the age-nativity structure of today's population, seen in Exhibit 1, has implications that must be weighed when making decisions that are oriented to the future needs or resources of the population.

- Over the next two decades 4.85 million current members of the Under 20 generation in the region will complete their education, most will enter the labor market, and many will be starting families and forming households.
- Over the next two decades, the 4.13 million current New Immigrants in the region (median age 29.8 years) will be in their peak earning

years, looking to trade up to better housing, and a growing number will reach retirement.

- Over the next two decades, most of the current 2.63 million members of the Baby Boom generation in the region will also reach retirement age and leave the labor force and many will trade down to less expensive or retirement housing.

Uncertainties hang over all projections of these transitions. These cohorts may choose different career paths or living arrangements or retire later or earlier than their predecessors. In addition, we must wonder how stable and predictable the populations of these cohorts are. Decision-makers would be right to wonder if one of the three large age-nativity cohorts might again transform the region's population by leaving in large numbers, perhaps to be outnumbered by a large new cohort of immigrants. Of the three large nativity-age cohorts in the SCAG region, the future size of the native-born Under 20 generation is probably least certain. This generation will be entering their young adult years when mobility rates are typically high, and substantial numbers could leave the area if they have difficulty finding good jobs or housing.

However, regional population forecasters and the decision-makers who rely on their forecasts can find some assurance in the signs that major demographic flows have stabilized since 1995. Much of the past turnover of the population occurred during the ten-year span from 1985 to 1995, which saw both 30-year peaks and declines in immigration, domestic migration, and births, and there are growing indications that this was a highly exceptional period.

Most significantly, the possibility of a new surge of immigration to the SCAG region nearly as large as came in 1988-1990 seems increasingly remote.

In order for immigration to the region to rise substantially from recent levels, one of two things would have to occur. Either immigration to the U.S. or the fraction of these immigrants coming to the region would have to increase.

The current direction of immigration policy seems unlikely to lead to large increases in national immigration in the near future.

After having been above 20 percent for 19 years (1972-1990), the share of new U.S. immigrants that locate in the region remained below 14 percent from 1994 through 2000. The stability of this ratio over long periods shows that there is considerable inertia in the geographic distribution of new immigrants. Established networks of immigrants support new immigrants and lead to chain migration along established paths. Now that the SCAG region's dominance as the main destination for new immigrants from major sending countries has been broken, with powerful assistance by the 1991-1994 recession, it seems unlikely to be restored in the near future. For these reasons, the possibility of a large increase in immigration to Southern California should be considered remote.

As we have seen, the surge in immigration in turn fueled the regional baby boom during the same period. Absent a resurgence of immigration, future trends in births will be determined largely by the fertility rates and population of the cohorts of U.S.-born girls that reach childbearing age. These

factors have been much more stable and therefore predictable than the past variations in immigration and births to immigrants.

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